ABSTRACT

The present invention provides a reusable spring driven autoinjector. The drive mechanism of the autoinjector of the present invention includes one or more drive springs formed of a shape memory alloy. Therefore, by alternating the shape memory alloy forming the one or more drive springs between austenite phase before an injection and a martensite phase after injection, the reusable autoinjector of the present invention is capable of providing an injection force that is higher than the compressive force required to cock the drive mechanism in preparation for a subsequent injection operation.